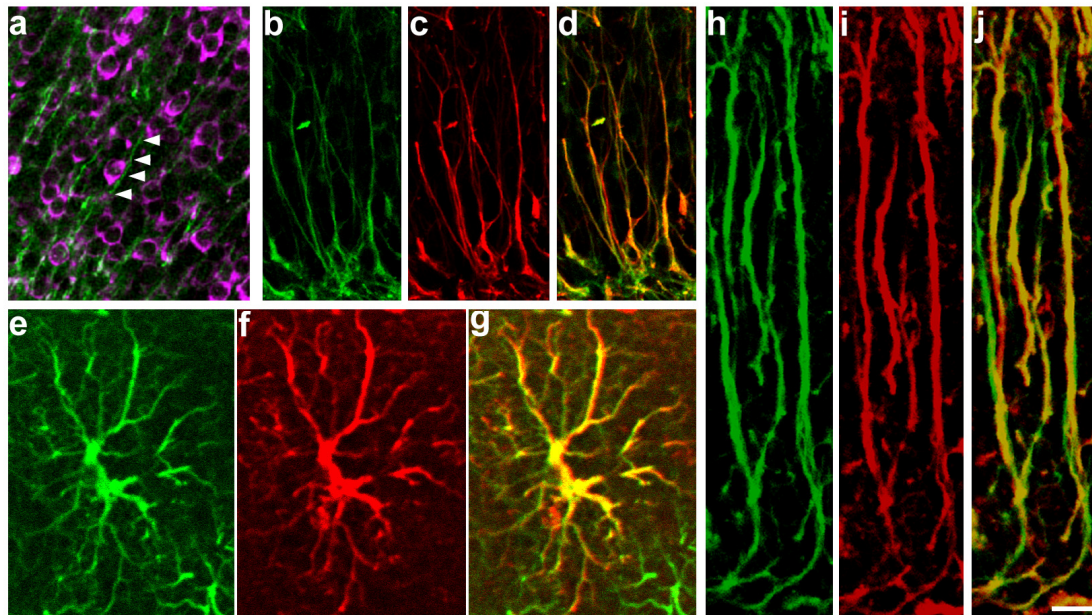
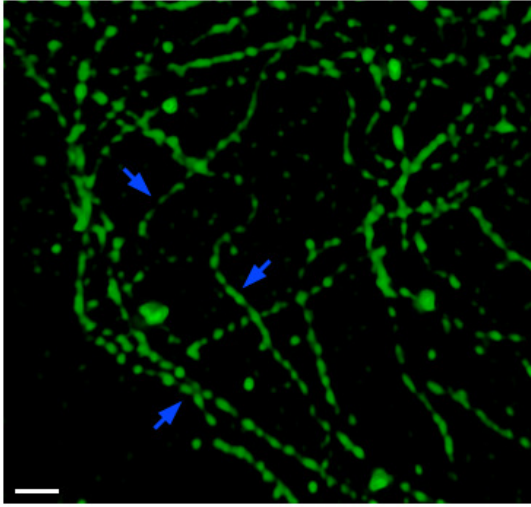


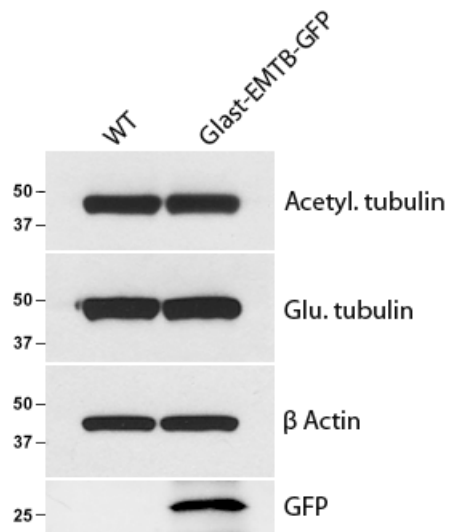
Supplementary Information



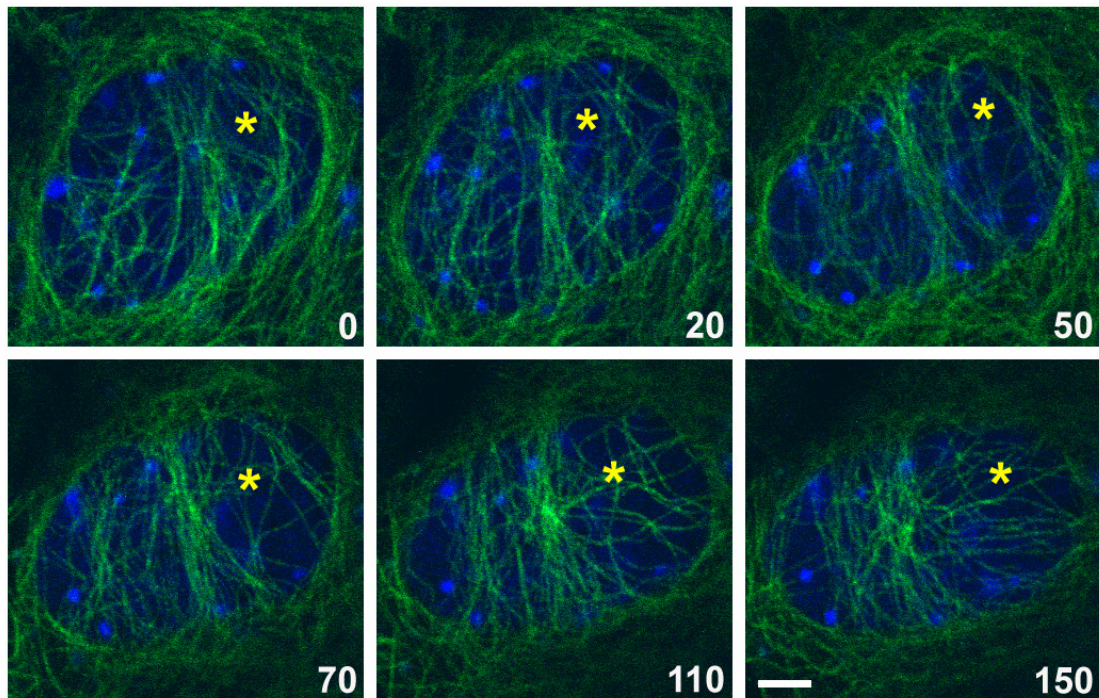
Supplementary Figure S1. GFP is expressed in astroglial cells in *Glast-EMTB-GFP* brains. (A) In E16 embryonic cortical plate, Tuj-1⁺ cortical neurons (purple) do not express GFP, but the radial glial fibers (arrowheads) spanning the cortical plate are GFP positive. In postnatal brain, GFP expressing hippocampal radial glial cells (B), cortical astrocytes (E), and cerebellar Bergmann glia (H) were co-labeled with astrocyte specific anti-GFAP antibodies (red; C, F, I). Merged panel (D, G, J) indicates co-localization. Scale bar: A, 25 μ m; B-D, 21 μ m; E-G, 12 μ m; H-J, 13 μ m.



Supplementary Figure S2. Labeled microtubule cytoskeleton in embryonic (E16) radial progenitors. Super resolution structured illumination (SRSIM) microscopy was used to image GFP labeled microtubule network in isolated radial progenitors. Individual microtubule fibers (arrows) can be visualized and studied in these cells. Scale bar: 1 μ m.



Supplementary Figure S3. Microtubule stability is not affected in Glast-EMTB-GFP brains. Immunoblot analysis of acetylated tubulin and detyrosinated, Glu-tubulin in wild type (WT) and Glast-EMTB-GFP cortices indicates that transgene expression does not affect the stability of microtubules. β -actin was used as control for equal loading. GFP is detected in Glast-EMTB-GFP, but not WT lane.



Supplementary Figure S4. Changes in the organization of microtubule cage surrounding nuclei. Microtubule cage around the nuclei is known to modulate the movement of nuclei within a cell. This time-lapse panel illustrates the extent of rearrangements that occur in the microtubule cage surrounding nuclei (compare changes in area indicated by asterisk). Time elapsed are indicated in minutes. Scale bar: 5 μ m.

Supplementary Table S1. Viability and organ size of Glast-EMTB-GFP mice

	WT	Glast-EMTB-GFP
Viability	100% (29/29)*	100% (34/34)*
Brain	0.46±0.013 gm.	0.45±0.026 gm.
Heart	0.13±0.01 gm.	0.13±0.012 gm.
Lungs	0.16±0.003 gm.	0.18±0.016 gm.
Kidney	0.23±0.008 gm.	0.25±0.018 gm.
Liver	0.94±0.084 gm.	1.1±0.16 gm.

* Viability of wild type (WT) and Glast-EMTB-GFP mice at 8 weeks was measured from 5 different litters. Number of mice per group: WT=29; Glast-EMTB-GFP=34. Organs were measured from 3 different mice per group. Data shown are mean ±SEM.